

SEQUENCE LISTING

<110> AstraZeneca AB
Morten, John E
Smith, John C
Anand, Rakesh

<120> Methods

<130> PDH E2

<140>

<141>

<160> 2

<170> PatentIn Ver. 2.1

<210> 1

<211> 2583

<212> DNA

<213> Homo sapiens

<400> 1

cgagtgcct cgcatctgg cccggctccc gctcgtcgca acagcgtgac tacagggtat 60
ggcgggggtcc gggcactgtg cggctggacc ccagttctg gggccacgcc gcggaaccgc 120
ttactgctgc agcttttggg gtcgcccggc gcgcgctatt acagtcttcc cccgcatcag 180
aaggttccat tgccttctct tccccccaca atgcaggcag gcaccatagc ccgttgga 240
aaaaaagagg gggacaaaat caatgaaggt gacctaattg cagagggtga aactgataaa 300
gccactgttg gatttgagag cctggaggag tgttatatgg caaagatact tgttgctgaa 360
ggtaccaggg atgttcccat cggagcgcac atctgtatca cagttggcaa gcctgaggat 420
attgaggcct ttaaaaaatta tacactggat tcctcagcag cacctacccc acaagcggcc 480
ccagcaccaa cccctgtgc cactgcttcg ccacctacac cttctgctca ggctcctggg 540
agctcatatc cccctcacat gcaggtaact cttcctgccc tctctccac catgaccatg 600
ggcacagttc agagatggga aaaaaaagtg ggtgagaagc taagtgaagg agacttactg 660
gcagagatag aaactgacaa agccactata ggttttgaag tacaggaaga aggttatctg 720
gcaaaaatcc tgggtccctga aggcacaaga gatgtccctc taggaacccc actctgtatc 780
attgtagaaa aagaggcaga tatatcagca tttgctgact ataggccaac cgaagtaaca 840
gatttaaaac cacaagtgcc accacctacc ccacccccgg tggcgcgtgt tcctccaact 900
ccccagcctt tagctcctac accttcagca cctgcccag ctactcctgc tggaccaaag 960
ggaagggtgt ttgttagccc tcttgcaaag aagttggcag tagagaaagg gattgatctt 1020
acacaagtaa aagggacagg accagatggt agaatcacca agaaggatat cgactctttt 1080
gtgcctagta aagttgctcc tgctccggca gctgtgtgct cccccacagg tcctggaatg 1140
gcaccagttc ctacagggtgt cttcacagat atcccaatca gcaacattcg tcgggttatt 1200
gcacagcgat taatgcaatc aaagcaaacc atacctcatt attacctttc tatcgatgta 1260
aatatgggag aagttttgtt ggtacggaaa gaacttaata agatattaga agggagaagc 1320
aaaatttctg tcaatgactt catcataaaa gcttcagctt tggcatgttt aaaagtccc 1380
gaagcaaatt cttcttggtg ggacacagtt ataagacaaa atcatgttgt tgatgtcagt 1440
gttgcggtca gtactcctgc aggactcatc acacctattg tgtttaatgc acatataaaa 1500
ggagtggaaa ccattgctaa tgatgttgtt tcttttagcaa ccaaagcaag agagggtaaa 1560
ctacagccac atgaattcca ggggtggcact tttacgatct ccaatttagg aatgtttgga 1620
attaagaatt tctctgctat tattaacca cctcaagcat gtattttggc aattgggtgct 1680
tcagaggata aactggtccc tcagataat gaaaaagggg ttgatgtggc tagcatgatg 1740
tctgttacac tcagttgtga tcaccgggtg gtggatggag cagttggagc ccagtggctt 1800
gctgagttta gaaagtacct tgaaaaacct atcactatgt tgttgtaact aactcaagaa 1860
tttctaaact ctcccaggtc acactgatc attcttaaca agatatttat atgttattaa 1920
acagggtggt gctttttatt ttaaccagtt atttttatta ttgagtctgc tcagataagt 1980
tatttataat gggcattact gaatttttaa aatgccgatt acacccaaatt attgtgcaca 2040
tttaataatc agacaccaga ttttttagctc tgtactccta attaagggac atgtatgtgg 2100
ccttgcttag ccctttggtg ataagtactt cctctaggaa atgtacgata ggtagaattg 2160
tggttcccta aagacaagta cataaagggt accctgatga aaccttgaag ttctgaaatt 2220
taactgccta aaatgtctc cttagatgtg agagaaagag aaatcagaaa aattaattct 2280
cttgggggaa gggcttgaat tgaagcttta ctttagaatt tagccctggt ttgaaatttt 2340

0976580 014801

```
<210> 2
<211> 545
<212> PRT
<213> Homo sapiens
```

```

<400> 2
Met Gln Ala Gly Thr Ile Ala Arg Trp Lys Lys Lys Glu Gly Asp Lys
  1              5              10              15

Ile Asn Glu Gly Asp Leu Ile Ala Glu Val Glu Thr Asp Lys Ala Thr
      20              25              30

Val Gly Phe Glu Ser Leu Glu Glu Cys Tyr Met Ala Lys Ile Leu Val
      35              40              45

Ala Glu Gly Thr Arg Asp Val Pro Ile Gly Ala Ile Ile Cys Ile Thr
      50              55              60

Val Gly Lys Pro Glu Asp Ile Glu Ala Phe Lys Asn Tyr Thr Leu Asp
      65              70              75              80

Ser Ser Ala Ala Pro Thr Pro Gln Ala Ala Pro Ala Pro Thr Pro Ala
      85              90              95

Ala Thr Ala Ser Pro Pro Thr Pro Ser Ala Gln Ala Pro Gly Ser Ser
      100             105             110

Tyr Pro Pro His Met Gln Val Leu Leu Pro Ala Leu Ser Pro Thr Met
      115             120             125

Thr Met Gly Thr Val Gln Arg Trp Glu Lys Lys Val Gly Glu Lys Leu
      130             135             140

Ser Glu Gly Asp Leu Leu Ala Glu Ile Glu Thr Asp Lys Ala Thr Ile
      145             150             155             160

Gly Phe Glu Val Gln Glu Glu Gly Tyr Leu Ala Lys Ile Leu Val Pro
      165             170             175

Glu Gly Thr Arg Asp Val Pro Leu Gly Thr Pro Leu Cys Ile Ile Val
      180             185             190

Glu Lys Glu Ala Asp Ile Ser Ala Phe Ala Asp Tyr Arg Pro Thr Glu
      195             200             205

Val Thr Asp Leu Lys Pro Gln Val Pro Pro Pro Thr Pro Pro Pro Val
      210             215             220

Ala Ala Val Pro Pro Thr Pro Gln Pro Leu Ala Pro Thr Pro Ser Ala
      225             230             235             240

Pro Cys Pro Ala Thr Pro Ala Gly Pro Lys Gly Arg Val Phe Val Ser
      245             250             255

Pro Leu Ala Lys Lys Leu Ala Val Glu Lys Gly Ile Asp Leu Thr Gln
      260             265             270

```

Val Lys Gly Thr Gly Pro Asp Gly Arg Ile Thr Lys Lys Asp Ile Asp
 275 280 285
 Ser Phe Val Pro Ser Lys Val Ala Pro Ala Pro Ala Val Val Pro
 290 295 300
 Pro Thr Gly Pro Gly Met Ala Pro Val Pro Thr Gly Val Phe Thr Asp
 305 310 315 320
 Ile Pro Ile Ser Asn Ile Arg Arg Val Ile Ala Gln Arg Leu Met Gln
 325 330 335
 Ser Lys Gln Thr Ile Pro His Tyr Tyr Leu Ser Ile Asp Val Asn Met
 340 345 350
 Gly Glu Val Leu Leu Val Arg Lys Glu Leu Asn Lys Ile Leu Glu Gly
 355 360 365
 Arg Ser Lys Ile Ser Val Asn Asp Phe Ile Ile Lys Ala Ser Ala Leu
 370 375 380
 Ala Cys Leu Lys Val Pro Glu Ala Asn Ser Ser Trp Met Asp Thr Val
 385 390 395 400
 Ile Arg Gln Asn His Val Val Asp Val Ser Val Ala Val Ser Thr Pro
 405 410 415
 Ala Gly Leu Ile Thr Pro Ile Val Phe Asn Ala His Ile Lys Gly Val
 420 425 430
 Glu Thr Ile Ala Asn Asp Val Val Ser Leu Ala Thr Lys Ala Arg Glu
 435 440 445
 Gly Lys Leu Gln Pro His Glu Phe Gln Gly Gly Thr Phe Thr Ile Ser
 450 455 460
 Asn Leu Gly Met Phe Gly Ile Lys Asn Phe Ser Ala Ile Ile Asn Pro
 465 470 475 480
 Pro Gln Ala Cys Ile Leu Ala Ile Gly Ala Ser Glu Asp Lys Leu Val
 485 490 495
 Pro Ala Asp Asn Glu Lys Gly Phe Asp Val Ala Ser Met Met Ser Val
 500 505 510
 Thr Leu Ser Cys Asp His Arg Val Val Asp Gly Ala Val Gly Ala Gln
 515 520 525
 Trp Leu Ala Glu Phe Arg Lys Tyr Leu Glu Lys Pro Ile Thr Met Leu
 530 535 540
 Leu
 545